

Please replace the paragraph beginning on page 1, line 31 with the following:

C² In another aspect, the invention includes a pharmaceutical composition that includes a NOVX nucleic acid and a pharmaceutically acceptable carrier or diluent, wherein "NOVX" includes the novel nucleotides and polypeptides disclosed herein.

Please replace Table 1 on page 4 with the following:

TABLE 1. Sequences and Corresponding SEQ ID Numbers

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| NOVX Assignment | Internal Identification Number | SEQ ID NO (nucleic acid) | SEQ ID NO (polypeptide) | Homology/ expression |
|-----------------|--------------------------------|--------------------------|-------------------------|--|
| 1 | 28804279.0.7 | 1 | 2 | Expressed in fetal kidney |
| 2 | 28326488.0.55 | 3 | 4 | Expressed in fetal kidney |
| 3 | 10312947.0.40 | 5 | 6 | Expressed in pituitary gland and homologous to acetylglucosaminyl transferase-like protein |
| 4 | 25330368.0.1 | 7 | 8 | Expressed in mammary gland |
| 5 | 4004056.0.143 | 9 | 10 | Expressed in adrenal, mammary, prostate and fetal kidney |
| 6 | 3084780.0.73 | 11 | 12 | Expressed in pancreas, fetal lung, stomach |
| 7 | SC20692369 | 13 | 14 | Homologous to N-acetylglucosaminyl transferases |

Please replace Table 5 on pages 9-10 with the following:

TABLE 5.

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NOV2   : 1   atgaccatgcatccatttacagtaaagggttgctacatctcagacaacacttcatgta 60
          |||
CHR11: 90905 atgaccatgcatccatttacagtaaagggttgctacatctcagacaacacttcatgta 90846

NOV2   : 61   aagtacacaaatcaaggaaacagcttcactgatgttacctttaatctaacaagatct 120
          |||
CHR11: 90845 aagtacacaaatcaaggaaacagcttcactgatgttacctttaatctaacaagatct 90786

NOV2   : 121  ctataaaacaagaaaacctctacgtacagatcttttaaaattaaagcaggcatctttgct 180
          |||
CHR11: 90785 ctataaaacaagaaaacctctacgtacagatcttttaaaattaaagcaggcatctttgct 90726
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NOV2 : 181 gatccacctctataagttgcaggttgagtatctcttatctgaaatgctagagaccagaag 240
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 CHR11: 90725 gatccacctctataagttgcaggttgagtatctcttatctgaaatgctagagaccagaag 90666
 NOV2 : 241 tgtttcaggtttcagatatatttagattttggaatatttgcataacacgagatatccaggg 300
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 CHR11: 90665 tgtttcaggtttcagatatatttagattttggaatatttgcataacacgagatatccaggg 90606
 NOV2 : 301 gaagagacccaagtctaaacatgaaattcatttatgtttcatatacacctcatatatata 360
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 CHR11: 90605 gaagagacccaagtctaaacatgaaattcatttatgtttcatatacacctcatatatata 90546
 NOV2 : 361 tagcctgaaggtaattttatacagtatattataatttgtccaaggaacaaagttttgactg 420
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 CHR11: 90545 tagcctgaaggtaattttatacagtatattataatttgtccaaggaacaaagttttgactg 90486
 NOV2 : 421 tgttttgactatgactcgctcatgtgaagtcataatgttgaattttccacttggtggcatcac 480
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 CHR11: 90485 tgttttgactatgactcgctcatgtgaagtcataatgttgaattttccacttggtggcatcac 90426
 NOV2 : 481 acaggcactcaaaaagcttcagatttgggagcatattggatttcgcatattcagattagg 540
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 CHR11: 90425 acaggcactcaaaaagcttcagatttgggagcatattggatttcgcatattcagattagg 90366
 NOV2 : 541 gatgctcaaccatactcagtttaccagtnnnnnncataatgtttgcaattactcctcc 600
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 CHR11: 90365 gatgctcaaccatactcagtttaccagtaaaaaaacataatgtttgcaattactcctcc 90306
 NOV2 : 601 ttttaaatatataattatTTTTTGGTATGGGGGAAAAGAGTGAGAACTTTATTTTcac 656 (nucleotides
 1-656 of SEQ ID NO: 3)
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 CHR11: 90305 ttttaaatatataattatTTTTTGGTATGGGGGAAAAGAGTGAGAACTTTATTTTcac 90250 (SEQ ID
 NO. 17)

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cont.

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{ Please replace the paragraph beginning on page 10, line 1 with the following: }

~~NOV1: 601 ttttaaatatataattatTTTTTGGTATGGGGGAAAAGAGTGAGAACTTTATTTTcac 656
 (nucleotides 1-656 of SEQ ID NO:1)~~

Please replace the paragraph beginning on page 13, line 1 with the following:

NOV3: 121 cgccactgcactccagcctgggcgacagagcgagactccgtctc 164 (nucleotides 1-164 of
 SEQ ID NO:5)

C5

Table 7

Please replace the paragraph beginning on page 13, line 17 with the following:

NOV3: 121 cgccactgcactccagcctgggcgacagagcgagactccgtctc 164 (nucleotides 1-164 of
 SEQ ID NO:5)

C6

Table 8

Please replace the paragraph beginning on page 13, line 50 with the following:

NOV3: 441 RRKAALVVPFETLRYRFSFPHSKVELLALLDAGTL 476 (amino acids 22-476 of
 SEQ ID NO:6)

C7

Please replace Table 10 beginning on page 14, line 1 with the following:

NOV3: 22 HLHLVTDAVARNILETLFHTWMVPAIDVPSPYHADQLKPQVSWIPNKHYSGLYGLMKVL 81
* *+ *++* ** *** ****+* * *++** +*****+*****
KIAA : 234 HFHLIADSLAEQILATLFQTWMPAVR-VDFYNDELKSEVSWIPNKHYSGLYGLMKVL 292

NOV3: 82 PNALPAELARVIVLDTDVTFASDISELWALFAHFSDTQAIGLVENQSDWYLGNLWNHRP 141
*** * *****+****+**+*****+* * * +*****+*****
KIAA : 293 TKTLPANLERVIVLDTDITFATDIAELWAVFHFKFGQQVLGLVENQSDWYLGNLWKNNHRP 352

NOV3: 142 WPALGRGFNTGVILLRLDLRQAGWEQMWRLTARRELLSLPATSLADQDIFNAVIKEHPG 201
*****+***** **++* ***** **++ + +*****+***
KIAA : 353 WPALGRGYNTGVILLLLDKLRKMKEQMWRLTARELMGMMLSTSLADQDIFNAVIKQNPF 412

NOV3: 202 LVQRLLPCVVNVQLSDHTLAERCYSEASDLKVIHWNSPKKL RVKNKHVEFFRNLYLTFLEY 261
** +*** ***** +***+ + *****+*****+*****
KIAA : 413 L VYQLPCFWNVQLSDHTRSEQCYRDVSDLKVIHWNSPKKL RVKNKHVEFFRNLYLTFLEY 472

NOV3: 262 DGNLLRREL FVCPSQPPPGXXXXXXXXXXXXXPCFEFRQQQLTVHRVHVTF-L-XXXX 320
*****+***** *+*****+*****+*
KIA : 473 DGNLLRRELFGCPSEADVNSSEN LKQLSELDEDDLCYEFRRERFTVHRTHLYFLHYEYEP 532

NOV3: 321 XXXXXDVT LVAQLSMDRLQMLEALCRHTPGPMSLALYLTDAEAQQFLHFVEASPVLAA RQ 380
*****+*****+***+* **+*****+*****+ + * ** +*
KIAA : 533 AADSTDVT LVAQLSMDRLQMLEAICKHWE GPISLALYLSDAEAQQFLRYAQGSEVLMSRH 592

NOV3: 381 DVAYHV VYREGPLYPVNQLRNVALA QALTPYVFLSDIDFLPAYSLDYLRASIEQLGLGS 440
+* **++**+** *****+*****+*****+*****+* **++* **++*
KIAA : 593 NVGYHIVYKEGQFY PVNLLRNVMKHISTPYMFLSDIDFLPMYGLYEYLRKSVIQDLAN 652

NOV3: 441 RRKAALVVP AFETLRYRFSFP HSKVELLALLDAGTYLTRYGEWPRGHAPT DYARWREAQ 500
+* **++*****+*****+*****+*****+*****+*****+*****+*
KIAA : 653 TTK-AMIVPAFETLRYRLSF PKSKAELL SMLDMGT LFTFRYHVWTKGHAPTNFAKWRTAT 711

NOV3: 501 APYRVQWAANYEPYVVVPRDCPRYDPRFVGFGWNKV AHIVELDAQEYELLVLP EAF TIHL 560
*****+* **++*****+*****+*****+*****+*****+*****+*
KIAA : 712 TPYRVWEADFEPYVVVRDCPEYDRRFVGFGWNKV AHIMELDVQEYEFIVLP NAYMIHM 771

NOV3: 561 PHAPSLDISRFRSSPT YRDCLQALKDEFHQDLS RHHGAAALKYLPA 606 (amino acids 22-606 of SEQ ID NO:6)
***** **++**+* ** **++* **++* **++* +* *****
KIAA : 772 PHAPSFDITKFRSNKQYRICLTKLEEFQDDMSRRYGFAALKYLTA 817 (SEQ ID NO.: 25)

Where * indicates identity and + indicates similarity.

NOV 3 437 GLGSRRAALVVPAFETLRYRFSFPHSKVELLALLDAGTL 476 (amino acids ~~437-476~~ 437-476 of SEQ ID
NO: 6) ~~437-476~~ 437-476

NOV4: 133 gtgagccaagattgtgccactgcactccagcctgggcaacaaagtgagactct 185
(nucleotides 13-185 of SEO ID NO: 7)

Please replace the paragraph beginning on page 17, line 7 with the following:

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A NOV5 sequence according to the invention includes the nucleic acid shown in Table 14. The disclosed nucleic acid encodes a polypeptide related to a neural membrane protein. The disclosed NOV5 nucleic acid are present in adrenal, mammary, prostate, testis, uterus, bone marrow, melanoma, pituitary, thyroid, spleen, placenta, bone marrow, mammary gland, fetal thymus - CRL7046, osteogenic sarcoma cell lines - HTB96, fetal lung, thalamus, fetal kidney, and Burkitt's lymphoma (Raji). Expressed sequence tag (EST) data suggest NOV5 sequences are expressed in aorta, blood, bone, brain, breast, central nervous system, colon, foreskin, germ cell, heart, kidney, larynx, lung, lymph, muscle, ovary, pancreas, parathyroid, placenta, pooled, prostate, stomach, testis, tonsil, uterus, whole embryo, blood, breast, cervix, colon, head and neck, lung, ovary, and stomach. The disclosed nucleic acid (SEQ ID NO:9) is 2,059 nucleotides in length and contains an open reading frame (ORF) that begins with an ATG initiation codon at nucleotides 63-65 and ends with a TGA stop codon at nucleotides 1,022-1,024, as is shown in Table 14. The nucleic acid sequence includes a Kozak consensus sequence. The representative ORF encodes a 320 amino acid polypeptide (SEQ ID NO: 10). The predicted MW of the NOV5 polypeptide is 35,204.3 Da. Putative untranslated regions upstream and downstream of the coding sequence are underlined in SEQ ID NO: 9.

Please replace the paragraph beginning on page 18, line 53 with the following:

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The disclosed NOV5 nucleic acid has a high degree of homology (100% identity) with a region of the gene encoding the uncharacterized human PP1201 protein (PP1201; Genbank Accession No.: NM022152.1), as is shown in Table 15. Also, the NOV5 nucleic acid has a high degree of homology (99% identity) with regions of the human BAC genomic clone RP11-378A13 from chromosome 2 (Genbank Accession No.: AC021016.4; CHR 2), as is shown in Table 16. Furthermore, the NOV5 nucleic acid has a high degree of homology (100% identity) with portions of a polynucleotide sequence from US Patent 5,843,716 (Seq2; Accession No.: AR062278), as is shown in Table 17. Still further, the polypeptide of SEQ ID NO: 38 has homology (70% similarity, 83% identity) with the rat neural membrane protein 35 (NMP 35; Accession No.: AAC 324631.1), as shown in Table 18.

Please replace the paragraph beginning on page 20, line 12 with the following:

C13 NOV5: 661 tggtatccatttcagtcaccatcttctgctttcagaccaaggtg 704 (nucleotides 1-704 of
SEQ ID NO: 9) ✓

Please replace the paragraph beginning on page 21, line 41 with the following:

C14 NOV5: 2013 cccattcttgaaagctgctggggcctccttgaggcttctggatc 2058 (nucleotides 1053-
2058 of SEQ ID NO: 9) ✓

Please replace the paragraph beginning on page 23, line 1 with the following:

C15 NOV5: 2031 ctggggcctccttgaggcttctggatc 2058 (nucleotides 1131-2058 of SEQ ID NO:
9) ✓

Please replace the paragraph beginning on page 24, line 33 with the following:

C16 NOV5: 2013 cccattcttgaaagctgctggggcctccttgaggcttctggatc 2058 (nucleotides 1053-2058 of
SEQ ID NO: 9) ✓

Please replace the paragraph beginning on page 27, line 54 with the following:

C17 NOV6: 793 aaaatatcc 801 (nucleotides 253-801 of SEQ ID NO: 11) ✓

Please replace the paragraph beginning on page 28, line 48 with the following:

C18 NOV6: 793 aaaatatcc 801 (nucleotides 253-801 of SEQ ID NO: 11) ✓

NS. Please replace the paragraph beginning on page 28, line 48 with the following:

C27 NOV6: 427 atccagacaatgctgt 442 (nucleotides 67-442 of SEQ ID NO: 11) ✓

Please replace the paragraph beginning on page 30, line 19 with the following:

C19 A NOV7 sequence according to the invention includes the nucleic acid and encoded polypeptide shown in Table 23. The encoded polypeptide is related to N-acetylglucosaminyltransferase III (GlcNAc-TIII). The tissue of origin of the NOV7 nucleic acid is pancreas. The disclosed nucleic acid (SEQ ID NO:13) is 2,357 nucleotides in length and contains an open reading frame (ORF) that begins with an ATG initiation codon at nucleotides 18-20 and ends with a TGA stop codon at nucleotides 2103-2105, as shown in Table 23. The representative ORF encodes a 695 amino acid polypeptide (SEQ ID NO: 14). Putative untranslated regions upstream and downstream of the coding sequence are underlined in SEQ

C19
cont.

Please replace the paragraph beginning on page 33, line 23 with the following:

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Please replace Table 25 beginning on page 33 with the following:

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Please replace the paragraph beginning on page 34, line 40 with the following:

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